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UNIVERSITY OF CALIFORNIA, SAN DIEGO

Tribes and the Formation of Social Inequality: a Case Study from Central Jordan

A Thesis submitted in partial satisfaction of the requirements for the degree Master of Arts

in

Anthropology

by

Matthew L. Vincent

Committee in charge:

Professor Thomas Levy, Chair Professor Guillermo Algaze Professor Geoffrey Braswell

The Thesis of Matthew L. Vincent is approved and it is acceptable in quality and form for
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Chair

University of California, San Diego

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Table of Contents

Signature Page	iii
Table of Contents	iv
List of Figures	v
Abstract	vi
Section One – Introductions, definitions, and foundations	1
Introduction	
Semantic Challenges	
Section Two – Tribalism in the Middle East: Anthropological Perspectives	7
Ethnography of 19th and 20th Century States, Tribes, and Nomads	
Iran	
Egypt	
Yemen	
Saudi Arabia	
Learning from Ethnographies	
Section Three: The Rise of Complex Societies in Iron Age Moab, Southern Jordan	16
Moab	
The Late Bronze Age Prelude: the Collapse of Imperial Structure	20
Early Iron Age	
The Emergence of Tribal States in the Southern Levant	23
Food Systems: Cycles of Sedentarization and Nomadization	24
Van der Steen's "New Model"	
A Multivariate Model: Tribes and Industry in the Southern Levant	27
Tribal States and the Potential for Archaeological Study	28
Surveying for Nomads	
Digging for Nomads	30
Moab and the Development of Complex Societies	
Conclusion	34
References	36

List of Figures

Figure 1: General situation of Moab in the Southern Levant	. 17
Figure 2: Subdivisions of Moab.	. 18
Figure 3: Rainfall for Moab (Miller 1991)	. 19
Figure 4: Settlement Patterns in Moab in Antiquity (Miller 1991)	. 31
Figure 5: LaBianca's Settlement Intensity Model (LaBianca 1990)	. 33

ABSTRACT OF THE THESIS

Tribes and the Formation of Social Inequality: a Case Study from Central Jordan

by

Matthew L. Vincent

Master of Arts in Anthropology

University of California, San Diego, 2013

Professor Thomas Levy, Chair

This project examines the role of nomadic pastoralists in the role of state formation in the Middle East, and specifically in the ancient polity of Moab in Central Jordan. Ethnographic studies are the primary sources for understanding the power relationship between nomadic and settled populations, and these studies provide the framework for understanding social inequality in Moab during the Iron Age.

vi

Section One – Introductions, definitions, and foundations

Introduction

Anthropological models of social organization provide the necessary tools for understanding the formation, adaptation, and collapse of different kinds of social formations in a variety of settings. The foundational work for establishing a typological sequence for social evolution from simple bands to complex state level societies was begun by cultural anthropologists more than 40 years ago (Sahlins 1968; Sahlins 1972; Service 1962). For researchers working in the Middle East, on both modern and ancient socio-political problems, tribes and tribalism are perhaps the most important variables in understanding the cyclical fluctuations between sedentary and nomadic populations, the formation of complex societies in peripheral regions, and the relationships between tribalism and the state. The social ties that bind tribal societies have played and continue to play a critical role in how societies in the Middle East adapt to both external and local powers. Anthropology provides the necessary analytical models for understanding tribalism and their social dynamics. In this thesis, anthropological models that focus on tribalism are examined in light of their applicability to solving social evolutionary problems in the Middle East, and in particular, the Southern Levant. This discussion does not assume what Norman Yoffee referred to as the 'Evolutionary Step-Ladder' (Baines and Yoffee 1998; Yoffee 2005), which he takes to mean that evolutionary anthropologists and anthropological archaeologists often assume that there was a determined and teleological evolution of societies from simple (band, tribe) to complex (chiefdom, state). Other scholars, such as Kent Flannery and Joyce Marcus (Flannery

1999; Flannery and Marcus 2012; Flannery 1972; Marcus and Flannery 1996), have argued that the general principles of social evolutionary change should not be perceived as deterministic, but rather key taxonomic constructs that are essential for scientific discourse; the key is to isolate the processes that led to the emergence, consolidation and ultimate collapse of new social formations. In this thesis, the semantic challenges posed by the variety of uses of some of these terms are examined in order to define these terms for the sake of the discussion here. Once this particular base has been established, the anthropological treatment of the notion of tribalism and the processes that emerge out of this social formation for promoting the growth of social inequality are explored. Some of the implications of the 'tribal imperative' in the Middle East archaeological record are explored in relation to the development of Iron Age complex societies (ca. 1200 – 500 BCE) in central Jordan when the first local historical kingdoms emerged.

Semantic Challenges

Tribal nomads and the formation of complex societies have often been assumed to be two very separate issues. Where the traditional models see "tribe" as a simple society on the way to becoming a state, recent ethnographic data suggests that tribe and state are not necessarily exclusive but often co-exist. Furthermore, scholars such as Yoffee and Baines(Baines and Yoffee 1998; Yoffee 2005) are critical of those who focus on stages rather than processes that are prompting the social change (Yoffee 2005:6-21). The traditional model which sees 'tribe' as an evolutionary step to achieve 'state' automatically separates the two. As one sees either state or tribe, one reflects upon the models which show the progression from tribe to state. However, recent literature has

shown that the two are very much related and the study of one does not exclude the other. In order to examine this issue closer, one must first deal with the issue of semantics surrounding both of the aforementioned terms: tribe and nomad. Since Service's work or social organization (Service 1962), tribe has been closely associated with just another step on the evolutionary ladder to statehood. This bias has boxed in tribes as always being in opposition to the state.

Porter attributes these biases to a product of research in the '60s through the '80s (for a complete discussion see: Porter 2012:10). Porter further argues that this bias "sets the tone for that work in two ways, one material and one conceptual" (Porter 2012:10). The former has created the assumption that one will not find material traces of nomads, and the latter that "pastoralism, and especially its political corollary, the tribe, is seen as either an earlier stage in the development of human societies" (Porter 2012:10). Porter's assertions highlight the problem with current research which focuses on the lack of sedentary sites as a sign of a less complex civilization. While such a correlation may often be the reality, arguments for less complex societies based on the lack of sedentarization reflect these prejudices.

Another semantic issue is that of nomad and pastoralist. Van der Steen notes that the two terms are often considered to be equivalent, but they are actually not at all (Cribb 1991:17-18). She points out that livestock were still kept in sedentary situations, although in the case of the Jordan Valley, they were kept for household consumption (van der Steen 2002:80). While many may not intentionally use these two terms interchangeably, it can be seen how the two terms tend to be married together and

thought of as equivalent. It should be taken into account, however, that these two should always be treated separately, and only when a pastoralist or a nomad is indeed a pastoralist nomad should the two be used together.

The problem of the term state also brings with it a certain set of prejudices. Just as tribal suggests a throwback to Service's evolutionary model, state is already seen as that fully formed, modern phenomena that are seen throughout the Western world today. Yet Khoury and Kostiner caution against such thinking, emphasizing that this reality may not "correspond to Middle Eastern realities, even in the late twentieth century" (Khoury and Kostiner 1990:2). In fact, the formation of states in the recent past across the region haven resulted in "new groupings and movements that retain certain tribal characteristics" (Khoury and Kostiner 1990:3). These formations become increasingly apparent through ethnographic research that highlights the relationship between tribe and state.

One must exercise caution with the use of these terms. As a perusal of the literature will show, time is spent on defining or redefining these terms, highlighting their ambiguity amongst the scholars today. Undoubtedly, the semantics of these terms will continue to change as our understanding of both the modern and ancient world continue to evolve. It is necessary, therefore, to roughly define these terms for this paper in order to clarify the reader's understanding of the author's intent.

Tribe: While scholars may wrestle with the definition of tribe, it is equally clear that this is also problematic among those being studied. Beck's essay on tribal Iran highlights this problem with one tribal leader asking another "where are your pastures

and where are your migratory routes?" as a way of undermining this persons status as a tribal leader (Beck 1990:213). We can draw from this that for many tribe, nomad, and pastoralist go hand in hand. For this reason, it is important to define the term in the context of this paper. Borrowing from Ira M. Lapidus (Lapidus 1990:26), we could define tribe as the "political entities that organize fragmented rural populations — be they small kinship or clientele groups or ad hoc alliances of individuals conceived as an extende family — into large-scale alliances". He further emphasizes (Lapidus 1990:27, 44-45) that these are the political and social structures found in the Middle East today. Although Lapidus's definition is based upon a modern context, it can easily apply to the archaic models as well. The inherent emphasis on the kinship ties and ad hoc alliances helps explain the social organization within tribal groups.

Pastoralism: According to some scholars, such as Ofer Bar-Yosef and Anatoly Khazanov (Bar-Yosef and Khazanov 1992:2), pastoralism should be seen as an economic system, although not necessarily separate from agricultural economies. Although Bar-Yosef and Khazanov suggest that "pure" pastoralists "should be defined as a distinct economic point of view" (Bar-Yosef and Khazanov 1992:2), others argue that the two can never be truly separated (Cribb 1991:14-17,23-34 #15; LaBianca 1990:38-41). The reality appears to be that pure pastoralists are rarely to be found, but are rather to be found in the context of sedentary populations, with some interdependence between the two distinct groups. To settle into a definition for pastoralists, it seems most appropriate to focus on the economic motivation of animal husbandry as suggested by Bar-Yosef and Khazanov (Bar-Yosef and Khazanov 1992:2). Such a definition emphasizes the

importance of livestock for their economic wellbeing, while the work mentioned above emphasizes the relationship between their economic system and that of agriculturalists.

Nomadism: Anatoly Khazanov (Khazanov 1994:15-17) best defines the problems, and ultimately gives the reader some guidelines which we can use to understand and define nomad in this context. The major distinction that Khazanov chooses to make is that between "wanderers" and "nomads", with "wanderers" referring to primitive hunter gatherer groups and "nomads" referring to pastoral nomads. In the case of the former, animal husbandry is not the economic system, while the later has shifted their economic view to center on livestock and the wealth to be gained from them rather than dependency upon them for subsistence alone, as suggested by Cribb (Cribb 1991). Furthermore, Khazanov adds (Khazanov 1994:209-211) that the nomads would have engaged in trading activities, although they would have only been taking advantage of the opportunities rather than being motivated by these. Nomadism carries with it the implications of pastoralism, although other activities can be seen to be involved as well. The implication of trade emphasizes set migratory routes used by nomads, versus migratory patterns that may simply follow available resources wherever they may be available at that time. These routes create a sort of bounding for the nomads, setting a territory within which they operate their economic systems.

State: In this thesis, state will be used in two different contexts. In the case of ethnographic research, the state refers to the modern states which formed in the Middle East during the 19th and 20th century; most of which formed in the wider context of European colonialism and their influence on the region. The other use refers to 'archaic

states', which Marcus and Feinman believe should be defined as "contrast to modem nation-states, archaic states were societies with (minimally) two class-endogamous strata (a professional ruling class and a commoner class) and a government that was both highly centralized and internally specialized" (Feinman and Marcus 1998:4-5). Likewise, these states are not pristine states, but are rather forming in the context of pre-existing states or in light of external forces, hostile (warfare) or peaceful (trade). In this case, the modern states can be defined in the same way that archaic states are, although the addition of the colonial powers adds another factor to the landscape. Not every modern state discussed formed under direct control of colonial powers, but the region was heavily dominated by them during this time and would certainly have been a factor in their formation. Perhaps Hourani's (Hourani 1990:306) simple definition may work the best: "a state is an entity which has a recognized authority claiming legitimate and exclusive power." Such a definition encompasses both the archaic and modern states discussed in this thesis, while still honing in on the fundamental ides of power and legitimacy.

Section Two – Tribalism in the Middle East: Anthropological Perspectives

Ethnography of 19th and 20th Century States, Tribes, and Nomads

Ethnographic material is useful for understanding tribe-state relationships since, in many places; these are recent historical events that can be studied with the formations of new states across areas such as the Middle East. Furthermore, the current relations between tribes and states in these regions can be further studied to understand the

continual relationship between state and tribe and how it has developed (or not) over the decades. We will look at four different ethnographic studies from the region, each bringing a different perspective of state-tribe relations to the forefront.

Iran

Beck's work in Iran focuses on the tribes of the nineteenth and twentieth centuries. Most notably, Beck concludes that tribes in Iran "were ways of integrating people into state structures while at the same time preventing these peoples' subordination to, or assimilation into, the state" (Beck 1990:215). This dichotomy between control and separation from the state is the basis of Beck's argument. Tribes became a function of the state, taking part in regional administration (Beck 1990:214) while at the same time maintaining a tribal identity (although often fluid), complete with customs, traditions and ethnolinguistic backgrounds (Beck 1990:189). Another feature of tribes in Iran is the notion of timelessness in contrast to the state. While tribes certainly had their own fluidity (more on this below) the tribes themselves outlasted the instability of the state (Beck 1990:216). In a volatile region such as the Middle East, such political formations as tribes demonstrate their value for the included members by being separate from the state in their very nature.

Like other regions in the Middle East, the nature of tribal identity fluctuated throughout the 19th and 20th centuries in Iran. A tribal group might have several names which that tribe is known by, but which name an individual chooses to use might be for political or economic advantage (Beck 1990:200). Beck (Beck 1990:200-201) observed one particular tribe which maintained both Kuruni and Qashqa'i identities and their

choice of identity fluctuated depending on the situation at hand. Such fluctuations in identity show that an individual's allegiance may change through the various identities they have in various situations, rather than always being tied to a single identity.

Tribal formation in Iran lacked some of the traditional notions of kinship ideas that exist about tribe formation. According to Beck, "[m]ost of Iran's tribal groups, particularly the larger ones, lacked notions of common descent for their members" (Beck 1990:194). Rather, these groups organized according to a variety of reasons including territory, political allegiance, ethnicity, symbolic systems and cultural ties (Beck 1990:194,196). Whatever the catalyst may be for the various tribal formations, there were kinship ties that grew out of those tribes, even though they didn't share an idea of common decent (Beck 1990:194-197). These groups formed tribal identities according to some shared commonalities, whether they were economic, political or militaristic, rather than familial ties. Such formations could very well exist in other places as well, with the common descent notion being introduced later on in the tribal groups but other factors motivating the initial bonding together.

Ultimately, this research shows the relationship between tribe and state. In some cases, the state would build up tribal groups when it worked to their advantage, while in other cases tribal leaders depended on the state to legitimize their position within the tribe (Beck 1990:192). What becomes clear is the codependency that the two demonstrate. Each political entity, the tribe and the state, may have formed for different reasons and work better in different settings. However, both are ultimately part of the same political

system and rely on one another to continue functioning. Rather than seeing the state supersede the tribe, the two coexist in a mutually beneficial manner.

Egypt

Hans Barnard studied the tribes of the eastern desert in Egypt, although this research faced particular challenges straight away. Barnard observed two major issues: one being the problem of identifying the material remains of the pastoral groups in these deserts (Barnard 2009:15); the other being the biases created by both ancient authors and modern scholars which simply lumped the dwellers of the eastern desert together with those of Nubia in the south (Barnard 2009:15). These observations are true for areas outside of Egypt as well. As is noted further below, the archaeological record often misses nomadic populations altogether, while presuppositions about tribal groups may be based on biased sources. His research found that as the population began to settle around the Nile in antiquity, a distrust grew of those dwelling in the deserts; despite this, there are more instances of cooperation that hostility between the two groups (Barnard 2009:16).

The continuation of eastern desert culture into present day can be seen through a variety of historical sources. Greek writings, for example, contain almost horrific descriptions of the desert dwellers (Barnard 2009:21). The modern group in the area today, known as the Beja, claim descent from both the initial group (Medjay) as well as the Blemmyes (those described by the Greek historians) (Barnard 2009:21). The Beja, like their earlier counterparts, maintain a similar relationship with the settled population, although there is still is an apparent distrust of the desert dwellers, their economic

interdependence is still in place (Barnard 2009:21-22). While the Beja may or may not be direct descendants of the original desert dwellers, it is clear there are certain cultural elements that have continued while others have been replaced. Barnard notes that Blemmyes were not Muslims nor consumed coffee (Barnard 2009:21), while the modern Beja are both Muslims and consume coffee. Even though some of the cultural markers change over time, these represent the various social evolutions the group may be going through as identity changes due to factors such as the introduction of coffee, Islam and technology.

Barnard closes with an emphasis on the need to continue archaeological work in the Eastern Desert. While he feels that much of the research on current archaeological material is exhausted, there is instead a future for research in the desert coupled with ethnographic work (Barnard 2009:22). Beyond the specific realm of interest, he calls for the development of an "archaeology of mobility" which would specialize in the nomadic populations and combine both archaeology and ethnoarchaeology in order to reconstruct a picture of nomadic populations in the past (Barnard 2009:22-23). The case of Egypt's tribes may have implications for the Southern Levant as well. The tenuous relationship described in Egypt between sedentary and nomadic populations may well have existed in antiquity. Furthermore, the shift in cultural markers may make it difficult to trace tribes throughout time and space. If one were looking for coffee cups as an indicators of coffee utensils for the Beja, it may appear that they were around for much less time than may actually be the case. If they were indeed descended from the Blemmyes, the change in consumption habits would leave a different mark in the archaeological record. Such shifts in material culture should not immediately discount the archaeology as forming

part of the greater picture, but may instead be an indicator of the larger social evolution happening within the group.

Yemen

Yemen represents a significant change from the other areas mentioned. Rather than dealing with nomadic pastoral tribes, Paul Dresch focuses on settled, agriculturally based tribes and their relation to the state. As Dresch points out, this is significant since "[t]ribes cannot escape the state by moving out" (Dresch 1990:254). These groups, both sedentary and tribal, present the opportunity to study a different segment of tribal society than tribal nomads. One particular point to note is the balance of power between tribes as observed by Dresch. He says that "[a] state bound to tribes invites instant collapse by ordering those tribes in situ but prospers when it leads them against the periphery, that is, against the richer areas that abut those arid zones where tribalism itself most prospers" (Dresch 1990:265). In other words, forcing a tribe to settle would have been detrimental to the state, whereas organizing the tribe and empowering them to into richer areas would have been prosperous for both the state and the tribe. Such movements would have certainly happened in antiquity as well, with tribes organizing to take on richer pasture and agricultural land than what they previously held.

Dresch's assertion is a key component to understand tribal-state relations.

Although Dresch is primarily interested in the imamates, state-like entities run by local imams in Upper Yemen (see: Dresch 1990:259), the fundamental point being made is all about a balance of power in Yemen. Here it becomes apparent how crucial the role is that tribalism plays in settled societies in the Middle East. Recently with the latest round

of elections taking place in Jordan, the government relied upon tribal leaders to maintain calm in there areas (Abuqudairi 2013). Contrasting this, situations such as Iraq and Libya where Saddam Hussein and Gadafi were seen returning to tribal territories for safety. This shows that despite the state, their real power still lays with the tribe. Leaders of archaic states would likely have had a tribal powerbase that they drew from, both the legetimize their position as well as to govern their territory.

Saudi Arabia

Joseph Kostiner's work (Kostiner 1990) in Saudi Arabia focuses on the balance of state and tribal values in Saudi Arabia. Throughout his essay, he highlights the role of tribe or tribal values in influencing the creation of the modern state of Saudi Arabia. Here we will look at a few of the specific examples of how tribal values can be seen in the state formation of Saudi Arabia, values which could well have been employed in antiquity as well. Ibn Sa'ud, founder of the modern state of Saudi Arabia, consolidated the state through intermarriage with his family and both nomadic and sedentary families (Kostiner 1990:230). In fact, Kostiner notes that Ibn Sa'ud "fully exploited the Wahhabi right to marry four women. By divorcing and remarrying frequently, he and his relatives were able to bind many tribes to the Saudi family" (Kostiner 1990:230). This would have built a significant familial network that would have given him a stronger power base than any potential rival. In addition to intermarriage, he used economic incentives as a way to sway people in his favor. For example, according to Kostiner "(Kostiner 1990:230), Ibn Sa'ud's stance on both booty and taxation garnered favor and maintained the tribal structure.

While Ibn Sa'ud used tribal values to consolidate the state, those same tribal values have influenced the state as well. Kostiner observers that tribal and state values coexisted, and more importantly, in certain cases tribal values influenced the state through opposition movements (Kostiner 1990:248). Such movements might carry tribal ideals or values that ultimately changed state behavior. As observed above, these same relationships are happening elsewhere in the Middle East, and shows how dependent the state is on tribalism to maintain power and control. The example of Ibn Sa'ud may be one of the better examples of what tribal power was like in antiquity. Through wealth and kinship, a tribal leader may have worked to increase his power through further marriages. Once such a leader consolidated their power, they would relied upon the tribal ties to maintain control over their territory in their archaic state situations.

Learning from Ethnographies

The ethnographic studies presented here each bring a different perspective from 19th and 20th century states that influence our thinking about archaic states, tribes, and their interaction in antiquity. Each of the studies presented here brings certain aspect to the conversation, which when brought together, help to give a much more complete picture of what might have been happening in antiquity. Based on the historical anthropological study of Iran, there is a strong sense of fluidity when it comes to tribal identification. As was observed by the ethnographer, a person might carry various tribal identities, whether familial, geographical or political. These sorts of identifications might very well hold true for the ancient world as well. Certainly one can gather that tribal identity may not have been as concrete as even the researchers make it out to be. Beck

(Beck 1990) observed that identity could change for the sake of personal gain, either economic or political. Certain identity shifts would certainly have happened in the ancient world as well, with one assuming a particular segment of their identity when it benefited them in some way or another.

Egypt highlighted the sense of distrust that exists from one population to another. Yet Barnard (Barnard 2009) shows that despite this distrust, they engaged in mutually beneficial economic activities. Such distrust as observed by Barnard has been seen elsewhere in as well. For example, throughout various parts of Europe, there is a distrust of the Roma or Romani people who are often nomadic or at least semi-nomadic. It is possible that this same sort of distrust existed in the Southern Levant between sedentary and pastoralist group.

The example of Yemen emphasizes the power balance between state and tribe. If a state pushes a tribe to settle, things will often fail. However, when the converse happens and the state empowers a tribe to attain richer territory, both the state and tribe prosper. Although the focus is primarily dealing with the settling of tribes through state intervention, the principle is applicable to a variety of tribal situations, including those that might involve moving pastoralists to new land. If it benefits them, they are less likely to resist assimilation into the state.

Saudi Arabia shows the state using tribal values to consolidate its rule, while also showing the influence of tribal values in the state's politics as well. Such balances are visible throughout much of the Middle East today, especially in regions with large tribal populations. The tribal members still look to their leaders for guidance, while the state

looks to the same leaders to exert their influence. The state depends on the tribal leaders to establish their legitimacy, while at the same time that same legitimacy can be challenged by those same leaders.

Each of these different examples can help guide research in the ancient world, but it cannot be done without a degree of caution. Since these studies have been conducted in the modern world, they primarily focus on modern tribes with modern influences. Not all of the factors that have brought about the formation of these modern states would necessarily hold true for the ancient world, which must be taken into account. However, as guides and frameworks they serve to highlight the timeless nature of the political, social, and economic ties between states and tribes.

Section Three: The Rise of Complex Societies in Iron Age Moab, Southern Jordan

Moab

Moab is located in Central Jordan, just east of the Dead Sea and between the ancient kingdoms of Ammon and Edom. The region of Moab can be divided into three distinct regions, Northern, Central, and Southern Moab. Northern Moab extends north of the Wadi Mujib to somewhere around the modern city of Madaba. Central Moab extends from the Wadi Mujib south to the Wadi Kerak. Southern Moab continues from the Wadi Kerak to the Wadi Hasa (Miller 1991:1). Although Central and Southern Moab are divided into two discrete units, they are both on the Kerak Plateau, and while divided by

the Wadi Kerak, there would still have been easy access between the regions. Most of Moab falls within the zones that allow for dry farming,



Figure 1: General situation of Moab in the Southern Levant

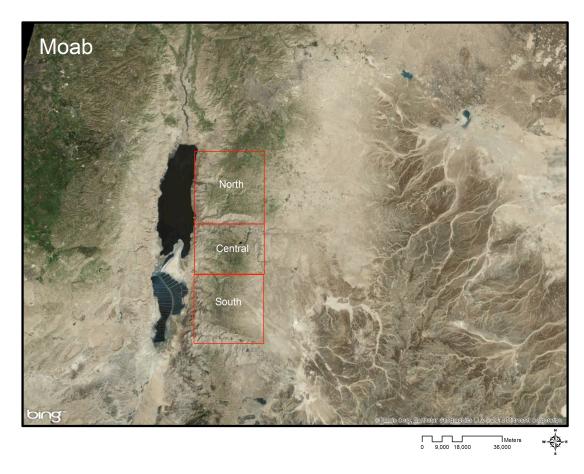


Figure 2: Subdivisions of Moab

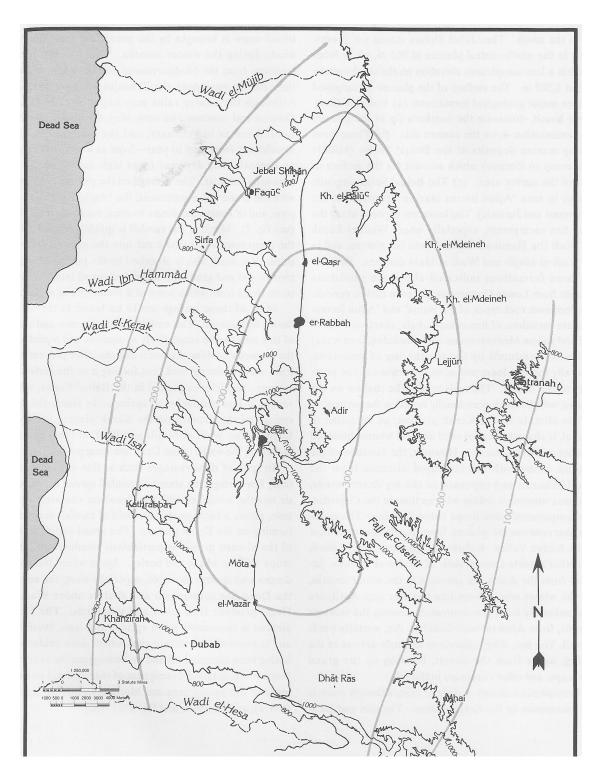


Figure 3: Rainfall for Moab (Miller 1991)

The Late Bronze Age Prelude: the Collapse of Imperial Structure

By the end of the 2nd millennium, which is know as the Late Bronze Age (ca. 1500-1200 BCE) many parts of the Southern Levant were still under Egyptian imperial control (Bunimovitz 1995). The period would have been marked by colonial influence from Egypt over local city-states, likely with heavy taxes and a strong military presence. While an important Late Bronze Age Egyptian administrative center has been found at Beth Shean, a site on the western side of the Jordan River(Mazar 1997; Mcgovern 1993; Mullins 2002), the situation in Jordan in central Jordan is still unclear. Some (Herr 1983) have argued for a possible Egyptian presence at the Amman Airport Structure, a site near the capital city of Amman, Jordan, others (Routledge 2004:67-70) have argued against this being an Egyptian at all.

Moab in the Late Bronze Age is still a contentious issue. The primary problem is the lack of solid archaeological evidence to support the theoretical material. One of the major sources for settlement patterns for ancient Moab comes from Miller's (Miller 1991) survey of that Kerak plateau in the 80's. Unfortunately, this source has proven to be unreliable for the Late Bronze Age due to the apparent problem with the ceramic dating (Bienkowski and Adams 1999; Finkelstein and Lipschits 2011; Routledge 2004; van der Steen 2002). Despite the problems with Miller's survey, one can attempt to reduce the problem by focusing on the sites where 5 or more sherds were present (Miller 1991:308-309; Routledge 2004:78-81). In consulting Miller's data (Miller 1991:308-309), the Late Bronze Age sites found with 5 or more sherds number only 28, compared to 108 with less than 5 sherds. Although the Late Bronze Age settlement pattern doesn't

show a strong sedentary population, it does not mean the plateau was devoid of any population at all. As discussed further below, most survey methodologies will fail to find nomads in the archaeological record, and will therefore present an inaccurate picture of settlement for any given period.

The lack of settlement does not necessarily mean the area was devoid of inhabitants, however. Nor does it suggest that the processes that brought about the complex societies in the Iron I couldn't already be taking place towards the end of the Late Bronze Age. Furthermore, it does not preclude that complex societies were already in place in the Late Bronze Age, but evidence for any of these is still lacking due to the lack of the archaeological work in the region.

The collapse of the Late Bronze Age would have affected each region differently, although there would have been common elements in each one. The Egyptian colonial influence in the area were have vanished at the end of the Late Bronze Age, leaving a power vacuum in the region. Likewise, the resource exploitation by the Egyptians would have also come to the end, in many cases leaving fields abandoned (Mazar 2008). For Edom, it was an opportunity to take over the copper industry in the region. For Moab, it was a shift in political understanding with the colonial forces abandoning the area (Routledge 2004:78-85). Overall, the collapse of the previous complex societies would have created opportunities for new alliances and a new social evolution to take place.

Early Iron Age

Although the Early Iron Age is equally obscure in Moab, we can infer from neighboring regions what might have also been happening in Moab. Looking towards

Central Jordan, it appears much more likely that the features showing up at the end of the Late Bronze Age are those that continue on into the Early Iron Age. Rather than a great disrupt, there is actually a continuation from before (McGovern and Brown 1986:338). Although the outside influences change, and therefore the social dynamics as well, this will only be clarified in Moab with continued excavation that includes both urban and rural archaeology.

By the Iron IB period, we find a formation of settlements which Glueck referred to as a string of fortresses whose function was to protect the borders of Moab (Glueck 1940). This theory has been disputed since Glueck first published it (see: Routledge 2000b; van der Steen 2009). Whatever their function may be, they are strong indicators of the expansion of settlements during the Iron Age. Unfortunately, the Early Iron Age is still somewhat ambiguous, especially as the material culture from the Late Bronze Age and Early Iron I bear many similarities and are therefore difficult to distinguish.

By the Iron II period, there are clear indications of complex society and one might also argue that the similarity of the site plans for the Iron I sites suggest some sort of central authority behind it. Unfortunately, these are all still heavily debated and the lack of archaeological evidence and work in the area makes it difficult to come to any solid conclusions.

The transition between the Late Bronze Age and the Early Iron Age certainly brought around a significant social change, just as is seen in the neighboring areas.

Continued work in Kerak should reveal Late Bronze Age settlement which in turn can inform us as to the social situation in the area before the collapse of the Late Bronze Age.

This background will help to shape our thinking regarding the growth of the polities in the Iron Age, and what social processes took place in that time to bring about the formation of these early states. The tribe, however, should not be excluded from the picture and should be considered as a fundamental part of the research.

The Emergence of Tribal States in the Southern Levant

The various ethnographic studies discussed above have shown that there is a clear relationship between tribe and archaic state, rather than the two being two different positions in an evolutionary scale. These studies can contribute to our understanding of the formation of early secondary states which appeared shortly after the collapse of the Late Bronze Age. Below are several models suggested by researchers in the region, with each model emphasizing certain elements of the social evolutionary process.

While it is still too early to tell which of these models may be most applicable to Moab, it seems to the author that Moab, like Edom, is not simply a by-product of outside influence, but is rather a product of internal processes taking place among the tribes in the region. This interpretation is based primarily on ancient historical documents such as the Hebrew Bible (Halpern 2005; Halpern 2010), the Mesha stele and other inscriptions (Routledge 2000a), and archaeological data that show the centrality of local ceramic and other material culture markers in the period to be discussed here for the southern Levant (Harrison and Barlow 2005). What factors contributed to these processes is still difficult to say, although it a model to describe these processes will likely also by a multivariate model, like that proposed by Levy below.

One thing of particular relevance to the Moab in antiquity comes from looking at both Egypt and Saudi Arabia. It is interesting to note that Mesha self-identities as a pastoralist. Whether or not he ever was (there is a good chance he was, since he came from a very rich pastoral region), his use of a pastoralist value would have helped to bind the pastoralist tribes to him, thus consolidating his power through the shared values. Even if there was a distrust of the sedentary population towards the nomadic tribes, Mesha's use of a pastoralist identification would have helped to bridge that gap.

Moab's rich pasturelands would have made it an ideal place for pastoralist nomads to live. At the same time, the geographic location, wedged between the rich industry of the south and the sedentary populations of the north, meant trade would have been passing through the land. Israel Finkelstein has suggested that this was what prompted the formation of the Moabite state (Finkelstein and Lipschits 2011). However, it is more likely that a multivariate model, including not only trade, but also local factors such as agriculture and pastoralism all prompted the formation of the early complex societies in the region.

Food Systems: Cycles of Sedentarization and Nomadization

Oystein LaBianca first presented his food systems model as a way to explain the cyclical settlement patterns observed at Hesban (LaBianca 1990). While the model may appear to be simple, there are plenty of complexities that accompany it. The basic thesis of the model is that as food production intensifies, the will also be increased sedentarization. Conversely, as food production breaks down, nomadization increases (LaBianca 1990; LaBianca and Witzel 2007:402).

LaBianca argues that as a group grows more sedentary, their group also becomes more rigid while the opposite is also true as a group becomes more nomadic, they become more open (LaBianca and Witzel 2007:404). LaBianca posits that society will have people on both ends of this range at any given point. While some may be settling, others may become more nomadic. At the same time, the social dynamics between these two groups changes accordingly. As LaBianca has stated, the more nomadic groups are able to enlarge their groups due to the less rigid bounds. This in turn leads to a more politically powerful group which might, in turn, dominate the more socially rigid settled tribes (LaBianca and Witzel 2007:404). This may challenge previous conceptions which few the sedentary populations as the logical powerbases. Instead, it seems that the nomadic populations were able to gain power through their nomadic nature, allowing them to eventually influence the social evolution in their territories.

The food systems aren't necessarily the catalysts, but rather are ways to measure what is happening. The food systems theory could be applied to other industries as well, although in the case of Ammon and Moab, agriculture and pastoralism are the two main natural resources of the area. Therefore, they were most likely central in these cyclical movements described by LaBianca. Whether they are a way to measure or the driving force behind change, the correlation is apparent and the movement between sedentarization and nomadization all play part in the relationship between states, state formation, and tribes.

Van der Steen's "New Model"

E. Van der Steen (van der Steen 2002) suggests a model in which there are as few assumptions as possible regarding WHAT. There is certain appeal to such a model, although it fails to deal with some of the anthropological issues at hand. Her model, which is mainly one of survival and adaptation, one that is reactionary rather than one of agency, should be carefully considered. Often times, it is appealing to construct a complex model to explain events such as state formation, although these complex models are often found lacking in the end as they try to cover their assumptions with even more convoluted explanations.

Although van der Steen's model may lack some of the agency presented in other models, a close examination reveals an opportunistic view of tribal life. Using modern ethnographic case studies, van der Steen reconstructs what she thinks the past may have looked like. One example is the comparison of Late Bronze Age city states to 19th century Jordan, focusing on the role of the bedouin in the Jordan Valley (van der Steen 2002:213-214). The Bedouin in the 19th century took advantage of circumstances to open themselves up to economic opportunities, such as trade. The example used is that of the settlement of Salt, the only inhabited town in the region, which was governed by local tribes and used as a market town.

The coalition of tribes was for economic benefit, with the tribes taking advantage of the opportunity of a settled town for trade. Unfortunately, van der Steen doesn't address the sedentarization of Salt in the first place, only the role of the Bedouin in using Salt as a market town. Therefore state formation is a process of opportunity, even chance.

Van der Steen relies on external factors and outside sources to push local tribes into action, rather than the agency coming from within the group themselves. Although van der Steen fails to recognize the role of agency in the overall process, her model pushes the need to recognize opportunity in the overall process. It is easy to give credit to the agents, and fail to recognize the factors and opportunities that may have played into their success.

A Multivariate Model: Tribes and Industry in the Southern Levant

The copper rich region of Edom in Southern Jordan provides a rich testing-ground for the development of tribal states. The natural resources would have been in demand after the collapse of the maritime trade routes. In an article focusing on this development, Levy proposes a multivariate model, which looks at a variety of factors that brought about the complex society found in the region during the Iron Age. While the previous models focus primarily on one single factor, Levy emphasizes the multidimensionality of the Iron Age development of complex society (Levy 2009:147-149).

The archaeological record at the two major production sites in Wadi Faynan suggest a non-sedentary population which was involved in the copper production in the region, reaching industrial levels in the 10th century BC at Khirbat en-Nahas (KEN) (Levy 2009:153). Such sites break the traditional mold of social evolution, indicating the possibility of nomadic complex societies capable of industrial level production while maintaining a nomadic lifestyle. Furthermore, while the neighboring regions to the north have traditionally assumed a political development in the highlands, the evidence from

Edom suggests the opposite (Levy 2009:153; Smith and Levy 2008). Edom demonstrates the possibility for a complex nomadic society involved in large-scale industrial production. Furthermore, development in the lowlands instead of the highlands challenges the models created for the regions further to the north.

In conclusion, Levy pulls from a variety of factors to model the social evolution in Edom. Factors such as the Late Bronze Age collapse and resulting power and commercial vacuum created the necessary opportunities for the local tribes to exploit their own resources and seek capital gain ((Levy 2009:150-151). Likewise, the climatic shift would have challenged the current subsistence strategies at the time, and would likely have been another catalyst for change and social evolution within the local communities (Levy 2009:151). Levy also emphasizes the ethnogenesis, the kinship bonds that existed or were created among the local population groups in the region (Levy 2009:155-156). Such kinship ties would have been essential to the development of a complex society amongst these nomadic groups. Finally, political ecology is another major factor that must be considered. As mentioned above, the abundant copper available in the Faynan region provided the local tribes would a natural resource that would have been in great demand after the collapse of the Eastern Mediterranean trade networks. These various factors all would have contributed to the social evolution that eventually led to the complex society as seen in the 10th century in Edom.

Tribal States and the Potential for Archaeological Study

The aforementioned models are useful for outlining research agendas for archaeology in the region of Moab. Since Moab offers great potential for the study of

nomads in transition, one must be familiar with the techniques required for archaeology and survey of both nomadic and sedentary people. Although there is some overlap between the two, there are certain limitations, which will be discussed below.

Surveying for Nomads

It is clear that a nomadic population will leave a smaller material footprint than that of a settled population. Rosen would argue that not only do nomads leave locatable remains, but it is actually possible to "reconstruct their lifeways and to place them in historical context" (Rosen 1992:75). While most will agree that it is possible to locate the remains of nomads, not all are comfortable with his comfort with interpretation (Finkelstein 1995:37; van der Steen 2006:77). Despite some misgivings regarding Rosen's claims, he certainly highlights a shortcoming of many surveys in the Southern Levant.

One such example is immediately applicable to the issue at hand, that of the particular survey methodology employed by Miller and his team (Miller 1991). As a vehicular survey was used, this would immediately raise the issue of being able to locate nomadic sites in the region. In fact, Rosen states that it is necessary to use pedestrian surveys with distances of no more than 100m apart (Rosen 1992:76). This is not a critique against Miller's survey. Miller's survey was a broad, regional survey and conducting such a survey with such tight constraints would have been prohibitively costly.

Rosen's proposed methods present a particular challenge. To conduct such a survey would require extensive teams or extensive time, neither which seem to be readily

available in the world of archaeology today. That being said, one should not give up entirely on conducting these surveys. Rather, if they were employed on a project by project basis within their regions, it would be possible to conduct such a regional study for the Kerak plateau and, in the process, uncover potential nomadic and pastoral sites.

Digging for Nomads

Excavation methods must also be adapted when it comes to archaeological investigation of nomads. What may work for a sedentary site, might blow through a nomadic site, destroying the scant remains which might otherwise be found. Due to the fragile remains, methods often employed in prehistorical excavations can be adapted for nomadic sites as well (Rosen 1992:76-77). Beyond methodologies, one must focus on particular features. Rosen argues for the presence of hearths as being strong indicators of nomadic sites (Rosen 1992:77). Certainly as an archaeology of mobility is developed, features like these and others will be identified that will easily mark these types of sites. Perhaps in the same way that pottery seriation became a valuable tool for relative dating, so too can the features found at nomadic sites, such as hearths. Cribb (Cribb 1991:93-97) elaborates further, suggesting that other stone structures such as storage bins or even beds might be visible at nomadic camp sights. Beyond installations, floors, animal pens and other such features might also be visible in the immediate vicinity of any campsite.

Moab and the Development of Complex Societies

Moab presents a different picture than either of its neighbors to the north or south.

While Ammon to the north has the richest agricultural land in the Transjordanian region,

Moab is much less fertile making pastoralism more important than agriculture. Likewise,

Edom to the south is rich with natural resources, specifically copper, while Moab has little to offer. Despite the lack of subsistence and production economies, Moab appears to have grown and formed complex socities in the Iron Age. Sites near the Mujib such as Lahun, Balu'a and Mudayna on the Wadi ath-Thamad all suggest a network of connected sites with a shared economy and material culture. Balu'a, the largest of these sites, reflects a site which was far too large to be supported solely by a subsistence based economy. In fact, the site is much larger than many of those found in the Southern Levant, at over 15ha in the Iron Age, it certainly would have been a major settlement in Moab.

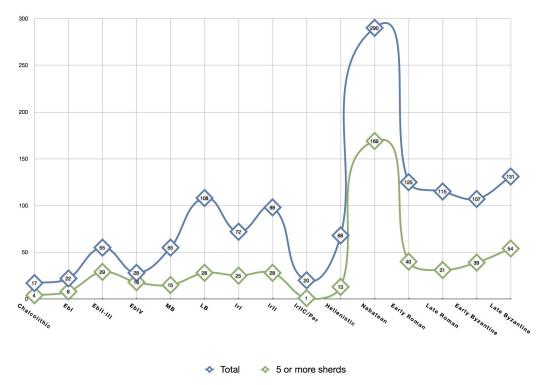


Figure 4: Settlement Patterns in Moab in Antiquity (Miller 1991)

In order to understand the social development of Moab in the Late Bronze and Iron Ages, we must look at the available data and consider several possibilities. First, Miller's survey of the Kerak Plateau (Miller 1991) will provide the necessary data for Central and Southern Moab. It has been noted that there are difficulties with some of the dates assign to the ceramics in his survey (Routledge 2004:78-79), however, we shall focus mainly on the sites where 5 or more sherds of certain types are presented to try and minimize any mis-dated readings. Figure 4 shows the settlement pattern for the Kerak Plateau, while Figure 5 presents a similar pattern for Central Jordan. Although there are some minor variations, particularly in the transition between the LB and IrI, the two figures reflect similar patterns. Miller's data does not allow for the precision reflected in LaBianca, which also explains the discrepancies between the two models.

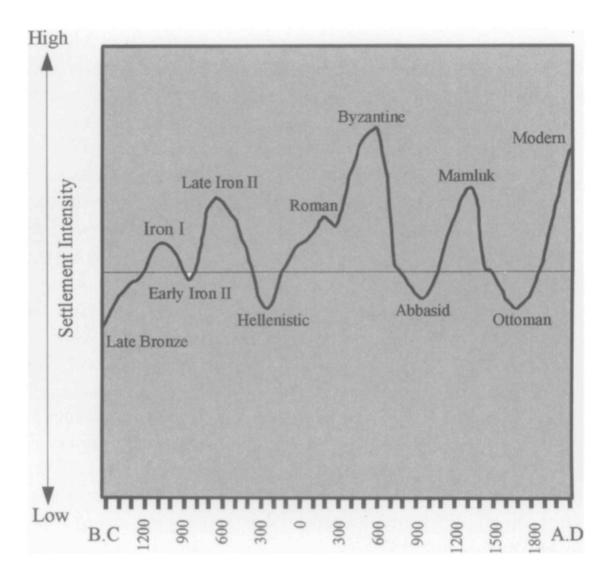


Figure 5: LaBianca's Settlement Intensity Model (LaBianca 1990)

Balu'a hints at some of the factors for social evolution in Moab. As has been previously mentioned, its size exceeds that of most of its neighbors and using a conservative population estimate, we can assume that it had somewhere between 2500 and 4000 inhabitants (Zorn 1994:34). Such a population would need somewhere between 500,000 and 800,000 kg wheat per year, and between 2,500 and 5,000 liters of water per

day to sustain the population. Modern estimates suggest that Jordan is able to produce between 1,000 and 2,000 kg of wheat per ha, meaning that Balu'a would need between 325-550ha for wheat production alone. Such needs indicate that Balu'a was much more than an average rural settlement and represented a much more complex society than what might be reasonably expected for Central Moab. Balu'a's strategic location on the major north-south trade route for Jordan might indicate one the major catalyst for the development of Moab. As has been previously mentioned, nomads often engaged in trade, and since Moab naturally lends itself to a nomadic lifestyle, it seems reasonable to assume that trade would naturally have been part of their routine. Over time, they would have amassed power and wealth in the region, which would have led to the creation of urban centers such of Balu'a, which would have certainly thrived of taxation and a market economy.

Conclusion

The research presented here, both ethnographic studies and theoretical models, all provide a way for conceptualizing the process of state formation in the Southern Levant. While many scholars have viewed tribes as being no more than a stage in social evolution, the studies here have shown that tribes and states can be and often have been closely tied together. For this reason, it is imperative that models dealing with state formation in the Southern Levant consider the role of tribes in the state formation process. Furthermore, models should not view tribes as being transitioned out, but rather view them as part of the integrity of the state itself. Our Western concepts of states may make it difficult to envision some of the early Iron Age states in the Southern Levant

which might very well have been no more than tribal confederations which bore strong state-like characteristics. That being said, ethnographic studies of the modern Middle East have made it clear that tribes continue to form part of the state processes in the region today, and most certainly would have in antiquity as well.

In order to study the process of state formation in the Late Bronze Age - Iron Age transition, it is necessary to form a basic theoretical model which can help guide the research. Levy's multivariate model provides the best framework for Moab, considering a variety of processes which affected the region during the time. Although Moab did not have the industrial production that Edom did, it still faced a similar set of factors that would have prompted the social changed in the region.

LaBianca's (LaBianca 1990) food system model must also be incorporated into the study as part of the multivariate model. Due to the nature of Moab, a heavily agricultural and pastoral area, food systems would have been central to any social or political change in the region. Therefore, such a model most certainly will help inform the processes behind the state formation in Moab.

Further research in the area will have to include an archaeology of mobility as well as a focus on sedentary sites. Due to the difficulty of locating nomads in the archaeological record, they have often escaped our notice altogether. By purposefully including an archaeology of mobility in a research design, our understanding of nomads in the region can increase and therefore be incorporated fully into our theoretical models. Until such a point, the Kerak Plateau will remain incomplete, with only a partial part of the story being revealed in the archaeological record.

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